

IN THE CLAIMS:

Please amend claims 37 and 50 as set forth below. This listing of claims will replace all prior versions, and listings, of claims in the present application:

1. (Previously presented) A method of providing content from a network to a wireless device, the method comprising:

receiving the content from a resource on the network according to a hypermedia protocol, wherein the wireless device is not compliant with the hypermedia protocol; and

converting the content to a message compliant with a message requirement of the wireless device, including generating an SMS message including the content.

2. (Canceled)

3. (Previously presented) A method as recited in claim 1, further comprising transmitting the message to an SMS Center (SMSC), for subsequent transmission by the SMSC to the wireless device over a wireless network.

4. (Original) A method as recited in claim 3, wherein said converting further comprises translating the content from a first content-type to a second content-type.

5. (Original) A method as recited in claim 4, wherein the first content-type is a mark-up language, and the second content-type is plain text.

6. (Original) A method as recited in claim 3, wherein said converting further comprises transcoding the content from a first character set to a second character set.

7. (Original) A method as recited in claim 3, wherein said converting further comprises:

translating the content from a content-type used by the resource on the network to a content-type used by the SMSC; and

transcoding the content from a character set used by the resource on the network to a character set used by the SMSC.

8. (Original) A method as recited in claim 4, wherein the first content-type is a mark-up language, and the second content-type is plain text.

9. (Original) A method as recited in claim 1, wherein said receiving the content from a resource on the network is responsive to a request for the content from the wireless device.

10. (Original) A method as recited in claim 9, wherein the request is an SMS request.

11. (Previously presented) A method as recited in claim 10, further comprising, prior to said receiving the content:

converting the request to be compliant with the hypermedia protocol; and

and transmitting the request to the resource on the network.

12. (Original) A method as recited in claim 1, wherein said receiving the content from a resource on the network is independent of any request from the wireless device.

13-24. (Canceled)

25. (Original) A method comprising:

receiving a request for content from a message service center providing message services to a wireless device;

generating a proxy request, the proxy request including an identifier identifying a network resource capable of providing the content; and

converting the content to a message compliant to a message requirement of the wireless device after the content is retrieved from the network resource, the message for subsequent delivery by the message service center to the wireless device.

26. (Original) A method as recited in claim 25, wherein the request is an SMS request and the message service center is an SMS Center (SMSC).

27. (Original) A method as recited in claim 26, wherein said generating a proxy request comprises performing a hypermedia operation.

28. (Original) A method as recited in claim 27, wherein said generating a proxy request comprises:

identifying a keyword associated with the request; and

mapping the keyword to an identifier of the network resource.

29. (Original) A method as recited in claim 28, further comprising maintaining a mapping of keywords to network resource identifiers.

30. (Original) A method as recited in claim 25, wherein said converting comprises:

translating the content from a content-type used by the network resource to a content-type used by the message service center; and

transcoding the content from a character set used by the network resource to a character set used by the message service center.

31. (Original) A method comprising:

receiving a message based on a request from a wireless device, the message conforming to a first protocol and a first character set implemented by the wireless device;

transcoding the message into a second character set of a network;

identifying a keyword in the message;

mapping the keyword to a network resource on the network;

retrieving, from the network resource, content in the second character set based on the keyword, using a second protocol implemented by the network;

translating the content from a content-type used by the application to a content-type used by the wireless device;

transcoding the content into the first character set; and

providing the content to the wireless device in the first character set using the first protocol.

32. (Original) A method as recited in claim 31, wherein:

the first protocol is SMS; and

the second protocol is a hypermedia based transport protocol.

33. (Original) A method as recited in claim 31, wherein:

the content-type used by the application is a mark-up language; and

the content-type used by the wireless device is plain text.

34. (Original) A method comprising:

receiving a message based on a request from a wireless device;  
identifying a keyword in the message;  
mapping the keyword to a network resource;  
retrieving content from the network resource based on the keyword;  
translating the content into a content-type associated with the wireless device;

and

transcoding the content into a character set compliant with a message  
requirement of the wireless device.

35. (Original) A method as recited in claim 34, further comprising providing the content  
to a message center using said character set, for subsequent transmission to the  
wireless device.

36. (Original) A method as recited in claim 34, wherein the message comprises an  
SMS message.

37. (Currently amended) A method as recited in claim 34, ~~wherein said providing~~  
~~comprises~~ further comprising providing the content to the wireless device in an SMS  
response.

38. (Original) A method as recited in claim 34, wherein said mapping comprises  
mapping the keyword to a URL associated with the network resource.

39. (Original) A method as recited in claim 34, wherein said retrieving comprises

retrieving the content using at least one HTTP transaction.

40. (Original) A method as recited in claim 39, wherein the HTTP transaction comprises an HTTP POST operation.

41. (Original) A method comprising:

maintaining a mapping of keywords to network resources;

receiving a first SMS message from a wireless device, the first SMS message transmitted on a wireless network;

identifying a keyword in the first SMS message;

using the mapping to determine a network resource associated with the keyword;

retrieving content from the network resource using an HTTP transaction;

translating the content into a different content type;

transcoding the content into a different character set; and

providing the content to an SMS Center in a second SMS message, for transmission to the wireless device.

42. (Original) A method as recited in claim 41, wherein said using the mapping to determine a network resource associated with the keyword comprises using the mapping to determine a URL associated with the keyword.

43. (Original) A method of providing content maintained remotely on a network to a wireless device, the method comprising:

receiving an SMS request for the content from the wireless device via an SMS Center (SMSC), the SMS request transmitted on a wireless network;

transcoding the SMS request from a plain text character set to a mark-up language character set;

extracting a keyword from the transcoded request;

maintaining a keyword-to-URL mapping;

looking up the keyword in the keyword-to-URL mapping to identify a URL associated with the keyword, the URL associated with an application capable of providing said content;

constructing an HTTP POST operation containing the keyword and the URL;

submitting the HTTP POST operation to the application over a wireline network;

receiving an HTTP response from the application in response to the POST operation over the wireline network, the HTTP response containing said content;

extracting the content from the HTTP response;

translating the content from a mark-up language to plain text;

transcoding the content from a character set of the application to a character set of the SMSC; and

sending the translated and transcoded content in an SMS response to the wireless device via the SMSC.

44. (Original) A method as recited in claim 43, further comprising providing a Web site user interface to allow updating of the keyword-to-URL mapping.

45. (Original) A method of providing content maintained remotely on a network to a wireless device, the method comprising:

receiving an HTTP message containing the content from an application, wherein

the HTTP message is not in response to a request by the wireless device;

translating the content from a content-type used by the application to a content-type used by the wireless device;

transcoding the content from a character set used by the application to a character set used by the wireless device; and

sending an SMS message containing the translated and transcoded content to an SMS center, for delivery to the wireless device.

46. (Previously presented) A processing system coupled to a network and configured to provide content from the network to a wireless device, the processing system comprising:

a processor; and

a storage facility coupled to the processor and containing instructions executable by the processor which configure the processing system to

receive content from a resource on the network according to a hypermedia protocol, wherein the wireless device is not compliant with the hypermedia protocol; and

convert the content to a message compliant with a message requirement of the wireless device, including generating an SMS message including the content.

47. (Original) A machine-readable program storage medium tangibly embodying a sequence of instructions executable by a machine to perform a method comprising:

receiving a message based on a request from a wireless device;

identifying a keyword in the message;

mapping the keyword to a network resource on the network;



retrieving content from the network resource based on the keyword;  
translating the content from a content-type of the application to a content-type usable by the wireless device; and  
transcoding the content into a character set compliant with a message requirement of the wireless device.

48. (Original) A machine-readable program storage medium as recited in claim 47, wherein the method further comprises providing the content to a message center using said character set, for subsequent transmission to the wireless device.

49. (Original) A machine-readable program storage medium as recited in claim 47, wherein the message comprises an SMS message.

50. (Currently amended) A machine-readable program storage medium as recited in claim 47, wherein said ~~providing~~ method further comprises providing the content to the wireless device in an SMS response.

51. (Original) A machine-readable program storage medium as recited in claim 47, wherein said mapping comprises mapping the keyword to a URL associated with the network resource.

52. (Original) A machine-readable program storage medium as recited in claim 47, wherein said retrieving comprises retrieving the content using at least one HTTP transaction.

53. (Original) A machine-readable program storage medium as recited in claim 52,

wherein the HTTP transaction comprises an HTTP POST operation.

54. (Original) An apparatus comprising:

- means for receiving a message based on a request from a wireless device, the message conforming to a first protocol and a first character set;

- means for transcoding the message into a second character set;

- means for identifying a keyword in the message;

- means for mapping the keyword to a network resource;

- means for retrieving, from the network resource, content in the second character set based on the keyword, using a second protocol;

- means for translating the content from a content-type of the application to a content-type usable by the wireless device;

- means for transcoding the content into the first character set; and

- means for providing the content to the wireless device in the first character set using the first protocol.

55. (Original) An apparatus for providing content maintained remotely on a network to a wireless device, the apparatus comprising:

- means for receiving an SMS request for the content from the wireless device via an SMS center, the SMS request transmitted on a wireless network;

- means for transcoding the SMS request from a first character set to a second language character set;

- means for extracting a keyword from the transcoded request;

- means for maintaining a keyword-to-URL mapping;

means for looking up the keyword in the keyword-to-URL mapping to identify a URL associated with the keyword, the URL associated with an application capable of providing said content;

means for constructing an HTTP POST operation containing the keyword and the URL;

means for submitting the HTTP POST operation to the application over a wireline network;

means for receiving an HTTP response from the application in response to the POST operation over the wireline network, the HTTP response containing said content;

means for extracting the content from the HTTP response;

means for translating the content from a content-type of the application to a content-type usable by the SMSC;

means for transcoding the content from the second character set the first character set; and

means for sending the transcoded content in an SMS response to the wireless device via the SMSC.